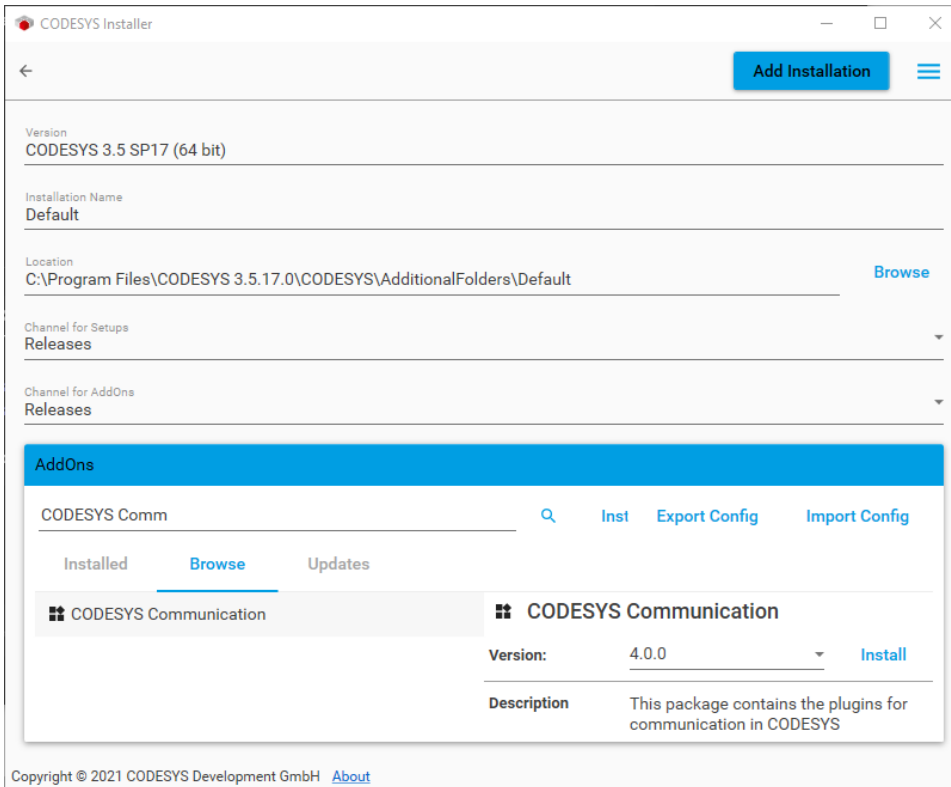


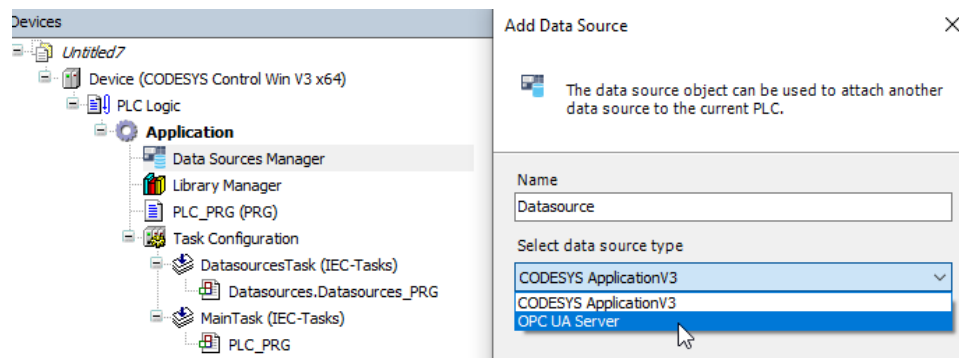
OPC UA Client: How to use the Client (>=SP17)

 This example requires an anonymous login: [OPC UA Server: Anonymous login](#)

1. Ensure CODESYS Communication package is installed



2. Add a datasource to your project and select "OPC UA Server" as source:



3. Set the URL and the security settings of the server which you want to connect:

Initialize Data Source Wizard - Provider settings

Initialize the Data Source

Set the communication parameters

Server URI

Information Model Source

☒ Online

☐ Offline

Security

Message Security Mode

Security Policy

4. Select the nodes you want to connect:

Initialize Data Source Wizard - Browse data items

Initialize the Data Source

Choose the data items

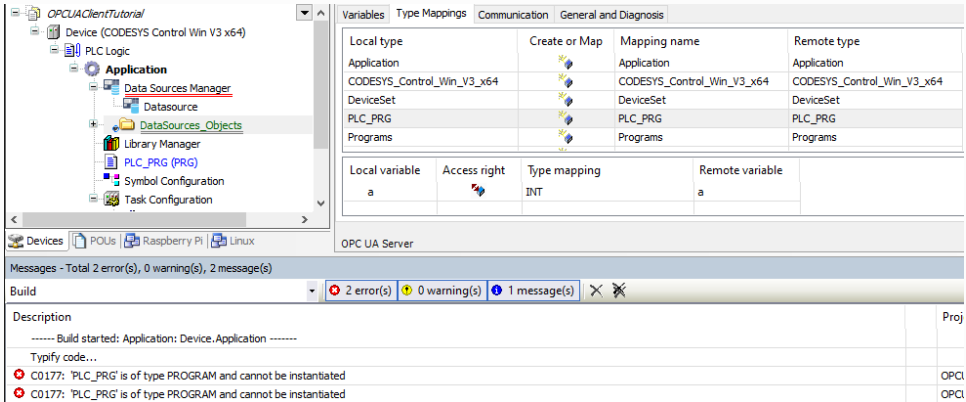
| Variables | Access right | Maximal access right | Type |
|--|--------------|----------------------|-------|
| <input checked="" type="checkbox"/> DeviceSet | | | |
| <input checked="" type="checkbox"/> CODESYS_Control_for_Raspberry_Pi_MC_SL | | | |
| <input checked="" type="checkbox"/> Resources | | | |
| <input checked="" type="checkbox"/> Application | | | |
| <input checked="" type="checkbox"/> Programs | | | |
| <input checked="" type="checkbox"/> PLC_PRG | | | |
| <input checked="" type="checkbox"/> udi1 | | | UDINT |
| <input type="checkbox"/> DeviceTopology | | | |
| <input type="checkbox"/> Server | | | |






5. For automatic updating, the option "Update always" must be set


| Local variable | Access right | Update always | Create or Map | Type mapping | Remote variable |
|--|--------------|-------------------------------------|---------------|--|--|
| DeviceSet | | <input checked="" type="checkbox"/> | | DeviceSet | DeviceSet |
| CODESYS_Control_for_Raspberry_Pi_MC_SL | | <input checked="" type="checkbox"/> | | CODESYS_Control_for_Raspberry_Pi_MC_SL | CODESYS_Control_for_Raspberry_Pi_MC_SL |
| Resources | | <input checked="" type="checkbox"/> | | Resources | Resources |
| Application | | <input checked="" type="checkbox"/> | | Application | Application |
| Programs | | <input checked="" type="checkbox"/> | | Programs | Programs |
| PLC_PRG | | <input checked="" type="checkbox"/> | | PLC_PRG | PLC_PRG |
| udi1 | | <input checked="" type="checkbox"/> | | UDINT | udi1 |

Local type

Note: your types must not conflict with any local objects, commonly PLC_PRG.



| Local type | Create or Map | Mapping name | Remote type |
|----------------------------|---|----------------------------|----------------------------|
| Application |  | Application | Application |
| CODESYS_Control_Win_V3_x64 |  | CODESYS_Control_Win_V3_x64 | CODESYS_Control_Win_V3_x64 |
| DeviceSet |  | DeviceSet | DeviceSet |
| PLC_PRG |  | PLC_PRG | PLC_PRG |
| Programs |  | Programs | Programs |

| Local variable | Access right | Type mapping | Remote variable |
|----------------|---|--------------|-----------------|
| a |  | INT | a |

Messages - Total 2 error(s), 0 warning(s), 2 message(s)

Build: 2 error(s) 0 warning(s) 1 message(s)

Description

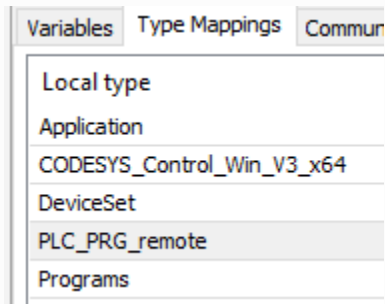
----- Build started: Application: Device.Application -----

Typify code...

C0177: 'PLC_PRG' is of type PROGRAM and cannot be instantiated

C0177: 'PLC_PRG' is of type PROGRAM and cannot be instantiated

To fix this, simply change the Local type in the Type Mappings tab:



| Local type |
|----------------------------|
| Application |
| CODESYS_Control_Win_V3_x64 |
| DeviceSet |
| PLC_PRG_remote |
| Programs |